

**Appendix Table 1-10**
**Highest-level science course enrollment of students in grade 11, by student and family characteristics: 2012**

(Percentage distribution)

| Student and family characteristic       | No science | General or basic science | Earth/ environmental science | Physical science | Biology 1 | Chemistry 1 | Physics 1 | Biology 2 | Chemistry 2 | Physics 2 | Other advanced science |
|---|------------|--------------------------|------------------------------|------------------|-----------|-------------|-----------|-----------|-------------|-----------|------------------------|
| All students                            | 19.9       | 0.3                      | 6.0                          | 2.3              | 10.6      | 26.9        | 13.9      | 10.4      | 5.0         | 2.6       | 2.1                    |
| Sex                                     |            |                          |                              |                  |           |             |           |           |             |           |                        |
| Male                                    | 21.1       | 0.3                      | 7.1                          | 2.6              | 11.3      | 25.8        | 13.8      | 8.1       | 4.8         | 3.2       | 2.2                    |
| Female                                  | 18.7       | 0.3                      | 5.0                          | 2.1              | 9.9       | 28.0        | 14.1      | 12.7      | 5.1         | 2.1       | 2.1                    |
| Race or ethnicity                       |            |                          |                              |                  |           |             |           |           |             |           |                        |
| White                                   | 18.4       | 0.3                      | 6.1                          | 2.3              | 9.4       | 28.8        | 13.1      | 11.0      | 5.6         | 2.9       | 2.3                    |
| Black                                   | 23.7       | 0.4                      | 5.9                          | 2.9              | 11.6      | 27.4        | 13.4      | 7.6       | 3.8         | 1.5       | 1.9                    |
| Hispanic <sup>a</sup>                   | 22.2       | 0.2                      | 5.8                          | 2.2              | 12.7      | 22.0        | 17.8      | 9.6       | 3.6         | 1.8       | 2.0                    |
| Asian                                   | 8.6        | 0.0                      | 2.7                          | 1.0              | 7.1       | 27.4        | 15.8      | 15.8      | 10.9        | 8.4       | 2.2                    |
| Other <sup>b</sup>                      | 22.2       | 0.4                      | 7.7                          | 2.8              | 12.5      | 26.8        | 9.2       | 10.7      | 3.7         | 2.2       | 2.0                    |
| Parents' highest education <sup>c</sup> |            |                          |                              |                  |           |             |           |           |             |           |                        |
| Less than high school                   | 32.6       | 0.0                      | 4.9                          | 5.2              | 11.1      | 14.8        | 16.8      | 7.9       | 2.7         | 1.0       | 3.1                    |
| High school diploma or equivalent       | 20.8       | 0.2                      | 7.7                          | 2.7              | 13.2      | 28.4        | 10.8      | 8.4       | 4.2         | 1.8       | 1.8                    |
| Associate's degree                      | 26.6       | 0.3                      | 8.8                          | 1.7              | 14.0      | 25.2        | 8.3       | 10.2      | 3.1         | 1.3       | 0.5                    |
| Bachelor's degree                       | 18.8       | 0.4                      | 6.9                          | 2.9              | 10.0      | 30.4        | 13.0      | 10.8      | 4.5         | 0.8       | 1.6                    |
| Master's degree or higher               | 12.8       | 0.2                      | 4.6                          | 1.9              | 6.9       | 27.2        | 17.5      | 13.1      | 8.0         | 4.7       | 3.1                    |
| Highest science course in grade 9       |            |                          |                              |                  |           |             |           |           |             |           |                        |
| No science                              | 33.0       | 0.2                      | 7.0                          | 2.9              | 13.1      | 23.2        | 6.6       | 7.0       | 4.2         | 0.8       | 1.9                    |
| General science                         | 19.6       | 0.4                      | 7.0                          | 2.1              | 18.7      | 32.7        | 5.1       | 7.8       | 4.1         | 1.8       | 0.8                    |



| Student and family characteristic             | No science | General or basic science | Earth/ environmental science | Physical science | Biology 1 | Chemistry 1 | Physics 1 | Biology 2 | Chemistry 2 | Physics 2 | Other advanced science |
|---|------------|--------------------------|------------------------------|------------------|-----------|-------------|-----------|-----------|-------------|-----------|------------------------|
| Earth/environmental/physical science          | 18.1       | 0.3                      | 5.9                          | 3.2              | 9.7       | 40.8        | 5.4       | 10.0      | 4.4         | 0.9       | 1.3                    |
| Biology 1                                     | 15.5       | 0.1                      | 6.1                          | 1.8              | 8.2       | 17.3        | 25.7      | 12.3      | 5.6         | 4.3       | 3.1                    |
| Above biology 1                               | 16.7       | 0.0                      | 2.8                          | 0.8              | 17.5      | 27.0        | 9.4       | 11.2      | 6.8         | 5.2       | 2.4                    |
| Pre-high school mathematics achievement       |            |                          |                              |                  |           |             |           |           |             |           |                        |
| Lowest fifth                                  | 31.7       | 0.5                      | 8.6                          | 4.1              | 15.2      | 19.5        | 7.9       | 7.3       | 2.3         | 0.8       | 2.3                    |
| Middle three-fifths                           | 18.7       | 0.2                      | 6.5                          | 2.4              | 11.1      | 30.0        | 13.5      | 10.3      | 4.0         | 1.5       | 1.8                    |
| Highest fifth                                 | 11.5       | 0.1                      | 2.2                          | 0.9              | 4.7       | 24.6        | 21.3      | 13.8      | 10.3        | 7.1       | 3.4                    |
| Students' educational expectations in grade 9 |            |                          |                              |                  |           |             |           |           |             |           |                        |
| High school or less                           | 29.1       | 0.3                      | 8.1                          | 3.6              | 17.1      | 21.8        | 6.8       | 8.1       | 2.1         | 1.0       | 2.1                    |
| Some college                                  | 22.7       | 0.5                      | 9.2                          | 3.1              | 11.1      | 26.6        | 12.2      | 8.9       | 3.1         | 1.5       | 1.2                    |
| Bachelor's degree                             | 17.9       | 0.1                      | 5.4                          | 1.7              | 8.7       | 30.0        | 17.2      | 9.6       | 5.0         | 2.2       | 2.3                    |
| Graduate/professional degree                  | 15.9       | 0.1                      | 4.4                          | 1.6              | 7.7       | 27.3        | 16.7      | 13.0      | 6.9         | 3.8       | 2.7                    |
| Don't know                                    | 21.6       | 0.4                      | 7.3                          | 3.4              | 13.1      | 27.3        | 11.6      | 8.2       | 3.6         | 1.8       | 1.7                    |
| Control of school in grade 12                 |            |                          |                              |                  |           |             |           |           |             |           |                        |
| Public  | 20.1       | 0.2                      | 6.2                          | 2.4              | 10.8      | 26.9        | 13.5      | 10.4      | 4.9         | 2.4       | 2.1                    |
| Private                                       | 7.5        | 0.1                      | 3.4                          | 1.0              | 6.3       | 32.6        | 22.7      | 11.9      | 6.7         | 5.4       | 2.6                    |
| Socioeconomic status in grade 12 <sup>d</sup> |            |                          |                              |                  |           |             |           |           |             |           |                        |
| Lowest fifth                                  | 25.9       | 0.2                      | 6.3                          | 3.2              | 14.6      | 22.9        | 11.7      | 9.0       | 2.8         | 1.4       | 1.9                    |
| Middle three-fifths                           | 20.5       | 0.3                      | 6.6                          | 2.4              | 10.8      | 28.1        | 13.1      | 10.0      | 4.4         | 2.1       | 1.8                    |
| Highest fifth                                 | 12.8       | 0.1                      | 4.0                          | 1.5              | 6.4       | 27.2        | 18.4      | 12.7      | 8.6         | 5.2       | 3.3                    |

<sup>a</sup> Hispanic may be any race. Asian, black or African American, white, and other races refer to individuals who are not of Hispanic origin.

<sup>b</sup> Other includes Alaska Native, American Indian, Native Hawaiian, Pacific Islander, more than one race, and those having origins in a race not listed.



<sup>c</sup> The highest level of education achieved by either parent.

<sup>d</sup> Socioeconomic status (SES) is a composite variable derived from parental education level, parental occupation, and family income. The quintile measure divides the SES distribution into five equal quintile groups. Quintile 1 corresponds to the lowest one-fifth of the population, and quintile 5 corresponds to the highest. For this report, the middle three quintiles are combined into one category.

NOTE: Percentages may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, special tabulations (2014) of High School Longitudinal Study of 2009 (HSL:09), National Center for Education Statistics.

*Science and Engineering Indicators 2016*